# PTYS 596A – Planetary Surface Processes Seminar

Zoom link: https://arizona.zoom.us/j/98414895730 Wed. 2:30 pm-3:30 pm
Live-online format

**Instructor:** Lynn Carter, lmcarter@email.arizona.edu
**Office Hours:** By appointment over Zoom, contact me via email to set a time.

**Course Description**: This seminar course will focus on discussion of planetary surfaces and their evolution, including geology of rocky planets and moons, icy surfaces and moons, regolith development, surface-atmosphere interactions, sub-surface structure and interiors, and climate change. The course will involve the exchange of scholarly information in a small group setting, including presentations and discussions of student research, reviews of recent science results and discussion of proposal ideas. Students will be expected to lead 1-2 presentations and participate in group discussions. This course is intended for graduate students; senior undergraduates may be able to enroll with permission of the instructor.

**Course Learning Objectives:**

- Students will expand their expertise in the subject area by reviewing, reporting, and discussing current research/literature in the topic area with other students, postdocs, and faculty.
- Students will incorporate and apply theoretical and practical (e.g., field studies, spacecraft mission data) knowledge to the development of their own research ideas.
- Students will demonstrate their understanding of planetary surface processes and improve their presentation skills by leading 1-2 presentations.
- Students will develop science critical thinking and team work skills by analyzing the work of others, asking/answering questions, and providing constructive comments during the discussion.

**Course Learning Outcomes:** Upon completion of the course, students will be able to knowledgeably describe and discuss the planetary surfaces research topics covered in the course, including critical analysis of the topics. They will also have improved presentation skills in an informal setting.

**Grading Scale and Policies:**
Grades (pass/fail) will be determined by participation and 1-2 presentations during the semester. **Students will be expected to lead either one 50-60 min discussion/presentation, or lead two 20-30 minute discussions.** Students should read any papers for discussion prior to the class period, and are expected to participate by asking questions and contributing to the discussion when others are presenting.

This seminar is informal and the presentations should also be informal, including time for discussion and expanding with background material as needed. Students may present their research results, research proposal ideas, summaries of key results from workshops they attended, reviews of current topics of interest, reviews of journal articles, or other topics relating to planetary surfaces research. Topics should be approved by the instructor and will be discussed during the first meeting of the semester.

**For a passing grade**, students must attend most sessions for the full 50 minutes (notify the instructor if classes need to be missed or had to be missed due to illness), participate in the

discussion on at least some occasions, and must give presentations as specified above. S grades may be obtained for going above and beyond, for example giving more than the required presentations, presenting something more complicated like lab tours or demonstrations, or helping to organize the seminar or find external speakers.

**Remote participation and recording:**

- For this class you will need access to a computer/laptop and a microphone or phone, and preferably a video camera during the time period of the class. You will need access to a reliable internet signal.
- The class may be recorded and placed on D2L for students to watch later. The Zoom settings have been changed so that names of students will not be displayed in the recording. If you have concerns with being recorded, please contact me.
- All recordings are subject to government and university regulations. Recordings may not be shared or otherwise posted to any internet site. Students accessing unauthorized recordings or using them in a manner inconsistent with University of Arizona values and educational policies are subject to suspension or civil action.

**Issues Related to COVID-19:**

- If you feel sick, or may have been in contact with someone who is infectious, stay home. Except for seeking medical care, avoid contact with others and do not travel.
- Notify me if you will be missing class so we can arrange for rescheduling of any presentations.
- Campus Health is testing for COVID-19. Please call (520) 621-9202 before you visit in person.

**Physical and mental-health challenges**: If you are facing physical or mental health challenges this semester, please note that Campus Health provides quality medical and mental health care. For medical appointments, call (520-621-9202. For After Hours care, call (520) 570-7898. For the Counseling & Psych Services (CAPS) 24/7 hotline, call (520) 621-3334.

**University Policies:**

All other university policies related to a syllabus are available at: https://academicaffairs.arizona.edu/syllabus-policies.

**Subject to Change Statement:**

Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.